

The psychologist's troubled background: Major related life experiences of psychology and law students

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This study explores major-related life experiences (MRLE) of psychology and law students to examine the stereotype of the wounded psychology student. Previous studies have shown that psychology students know people with mental disorders and are seeking treatment themselves. However, these studies do not allow drawing conclusions about the direction of these effects or the relationships' emotional closeness. As a consequence, the present, highly powered (n = 615) study examined whether psychology students and their close social environment experience more MRLE prior to the beginning of their university education than law students and a control group. Results show that especially the very close social environment of psychology students experienced more MRLE than the respective environment of law students, supporting the common assumption that psychologists themselves have a troubled past. This study contributes substantially to a better understanding of students' personal background and could help improve teaching quality by considering these effects.

Keywords: *life experiences; stereotypes; psychology students; vocational choice; wounded healer.*

Theoretical background

MOST PEOPLE WORKING in the field of psychology probably came across the widespread stereotype that psychologists or their families suffer more often from psychological problems than the average population. There is empirical evidence for the 'neurotic psychologist' stereotype in different contexts (Sydow, 1998, 2007; Sydow et al., 1998). Additionally, the archetype of the 'wounded healer' (see e.g. Groesbeck, 1975) reckons that psychotherapists were confronted with psychological difficulties in their past.

Previous studies have shown that psychology students are less stable and more introverted, serious, and prone to anxiety and have more problems handling tension than other students (Barton & Cattell, 1972; Goldschmid, 1967; Yonge & Regan, 1975). Additionally, studies have shown that psychotherapists' attachment styles are often insecure, sometimes even unresolved, suggesting a difficult family climate (Petrowski et al., 2013; Schauenburg et al., 2010).

Only few studies have examined psychology students' experiences with psychological problems. Boor (1975) showed that psychology students are overrepresented among students seeking help at a psychological counselling centre. Consistently, Hardy and Calhoun (1997) showed that psychology students are more worried about their mental health and more likely to consult a therapist than other students. In Connor-Greene's (2001) work conducted on the participants of an abnormal psychology class, almost every student knew at least one person well who suffered from a psychological disorder. This research indicates that psychology students have remarkably high major-related life experiences (MRLE), that is, experiences that are reflected in the contents of their studies. MRLE for psychology students might be diagnoses of psychological disorders or undergoing psychotherapy, and will be referred to as psychopathological life experiences (PLE) in the following.

Both one's own and close ones' experiences with psychological disorders,

successful or unsuccessful psychotherapy, as well as the contact of role models could serve as theoretical pathways for the impact of life experience on the choice of a related major. Gianakos (1999) for example could show that the knowledge about a profession and role models in a certain area positively influence self-efficacy and therefore a stable career (Gianakos, 1999). Even if this study concentrated on careers and not the choice of a major, the transfer of the results to a possible pathway from MRLE to the choice of major seems not to be too far to seek. In addition, own experiences with disorders and therapy could also motivate someone to learn more about dealing with own problems – as well as to help other people the same way, they themselves or their family received help. Referring to the stereotype of a troubled psychologist, these two paths build a theoretical framework for the development of a former patient/relative of a patient to a psychology student.

However, as previous studies did not control for the point in time when MRLE occurred, they could not draw conclusions about the direction of this relationship and hence not explore those pathways. Additionally, they did not assess the emotional closeness of affiliated persons with PLE. As previous studies have shown that the level of parental emotional closeness is related to the influence parents have on their adolescent children (e.g. Coombs et al., 1991; Harris et al., 1998; Whitbeck et al., 1993), it seems crucial to differentiate the degree of emotional closeness in further research. Moreover, these studies were conducted some time ago and there is no recent research into psychology students' MRLE. As such, the present highly powered study aims to fill this gap by exploring whether

psychology students have encountered more MRLE before their studies than students with other majors. Further, as it is possible that related life experiences occur in every major, we aimed to compare psychology students with students that study a major including topics related to possible real-life experiences. We therefore compared MRLE of psychology students (i.e. PLE) with MRLE of law students (i.e. LLE – law related life experiences), such as being the victim of an assault. More precisely, we were interested whether psychology students have more PLE than students with other majors and whether they know people with more PLE than students with other majors. As Studt (2013) showed, the close environment has a strong influence on adolescents. Therefore, the latter hypothesis is expected to be especially true for the emotionally close relationships of psychology students. We also expected that this pattern would emerge only for the MRLE of psychology students (i.e. PLE) and not for the MRLE of law students (i.e. LLE).

Method

Participants and procedure

Six-hundred fifteen (435 females, mean age = 23.02 years, SD = 4.57) German students¹ participated in the study. One-hundred eighty-five were psychology students, one-hundred ninety were law students, and two-hundred forty students had other majors (control group).

In the German educational system, the 3-year Bachelor provides a general overview of a subject and the 2-year Master provides further specialisation (e.g. clinical psychology). A law degree differs as it is not separated into an undergraduate and postgraduate degree: high school absolvents start studying law after school and finish their studies after four to

¹ Five out of 620 participants were excluded from the analysis. Four participants had vocational or student experiences in both majors (psychology and law) and hence could not be allocated to one group only. One student was excluded due to extremely short process time (<10 sec) of the single survey pages with co-occurring extremely high values as this behaviour indicates non-serious processing (see e.g. Abuhalmeh et al., 2011).

five years later. Hence, the students assessed in this study ranged between their first and fifth year of studies thus being a mixed sample of undergraduate and graduate students, regardless of their group.

They were recruited via a short advertisement including a link to an online questionnaire that was posted in social network student-groups. As an incentive, two coupons for €10 for an internet shopping site were raffled among all participants. Due to organisational necessities, data collection was limited to a time window of two weeks. After two weeks, data collection was stopped and the achieved sample size was reviewed for post-hoc-power. As the power was excellent, $1 - \beta = 0.99$ ($\alpha = 0.05$, $\eta_p^2 = 0.02$), the achieved sample size was used.

All participants gave informed consent by clicking 'continue' after the introduction and information page of the online survey. The research reported herein was conducted at the Ludwig-Maximilians-University-Munich and was approved by the ethics committee of the Department of Psychology, LMU-Munich, in accordance with the ethical standards expressed in the Declaration of Helsinki.

Measures

Psychopathological life experience (PLE). PLE was measured by three questions asking about psychotherapy ('Did you/an affiliated person receive psychotherapeutic or psychiatric treatment prior to beginning your studies?'), psychological disorders ('Were you/an affiliated person diagnosed with one or more psychological disorders prior to beginning your studies?'), and traumata ('Did you/an affiliated person experience one or more traumatic events prior to your studies?'). Participants were asked to

answer on a trichotomous scale ('no' [0]), 'yes, once' [1], 'yes, several times' [2]). All questions referred to the time prior to the beginning of studies to avoid reciprocal linkages between studies and MRLE. Subsequently, participants were asked to rate the closeness to the affiliated person described on a 3-point Likert scale ('not close', 'close', 'very close') to control for emotional closeness.

Legal life experience (LLE). LLE was measured analog to PLE, asking for lawsuits ('Were you/an affiliated person involved in a lawsuit once or several times prior to beginning your studies?'), offences ('Did you/an affiliated person commit a crime/offence prior to beginning your studies?'), and victimisation ('Were you/an affiliated person the victim of a crime/offence prior to beginning your studies?'). The first questions, regarding psychotherapy or a law suit both implicate a specific involvement with the respective profession. We decided not to ask for receiving legal services, rating those more equivalent to psychosocial consultation in contrast to the specific and more conservative criterion of psychotherapy.

Results

To test our hypothesis, we examined whether own life experience (PLE, LLE) differed between students and ran the same analyses for each closeness category of affiliated persons, to examine whether the social environment of psychology students plays an important role in the theory of the wounded healer. For each step, we used a 2×3 mixed design ANOVA with life experiences (PLE, LLE) as within-subject factor and major (psychology, law, control) followed by post-hoc *t* tests.² As there were eight DVs for each of the three group comparisons (psychology

² We report the results of ANOVAs and *t* tests for enhanced understandability. As MRLE was measured using ordinal scales, we also ran non-parametric test, which resulted in the same trends of significance as the results we report in this article. Additionally, to control for a potential overlap between the two types of life experiences, we conducted stepwise ANCOVAs for each of the eight DVs with the correspondent MRLE as a covariate. All trends of significance remained unchanged.

Table 1: Means and standard deviations of all groups.

Measures	Psychology		Law		Other Majors	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Own						
LLE	0.55	1.04	0.70	1.17	0.42	0.83
PLE	0.74	1.37	0.56	1.03	0.63	1.27
Very close						
LLE	0.48	1.24	0.47	1.43	0.35	0.99
PLE	1.25	2.49	0.60	1.38	0.66	1.53
Close						
LLE	0.37	2.34	0.46	1.36	0.15	0.64
PLE	0.83	1.96	0.27	0.97	0.55	1.67
Not close						
LLE	0.16	0.58	0.27	0.96	0.13	0.53
PLE	0.62	1.73	0.21	0.83	0.40	1.56

Note: LLE = legal life experiences; PLE = psychopathological life experiences.

vs. law, psychology vs. others, law vs. others), our level of significance was set to $p = 0.006$ (Bonferroni corrected). Means and standard deviations are shown below in Table 1. All *t*-test results are summarised in Table 2, we only describe data for the significant *t* tests in the following.

The ANOVA for own life experiences revealed a significant interaction of experiences and major, $F(2,612) = 3.75$, $p = 0.024$, $\eta_p^2 = 0.01$. No main effect for major, $F(2,612) = 1.24$, $p > 0.25$, nor for experiences, $F(1,612) = 2.30$, $p = 0.130$, was found.

Post-hoc *t* tests showed that there was no significant difference between psychology students, law students, and the control group regarding own PLE.

Post-hoc *t* tests showed that law students did have more LLE than the control group, $t(326.11) = 2.81$, $p = 0.005$, $d_{\text{cohen}} = 0.28$, 95 per cent CI [0.09, 0.48], but there were no significant differences for the other comparisons.

The ANOVA for the life experiences of very close persons showed a significant interaction of experiences and major,

$F(2,612) = 5.35$, $p = 0.005$, $\eta_p^2 = 0.02$, a significant main effect for major, $F(2,612) = 5.51$, $p = 0.004$, $\eta_p^2 = 0.02$, and experiences, $F(1,612) = 25.13$, $p < 0.001$, $\eta_p^2 = 0.04$.

As expected, post-hoc *t* tests showed that 'very close' persons of psychology students did have more PLE than those of the control group, $t(288.48) = 2.86$, $p = 0.004$, $d_{\text{cohen}} = 0.29$, 95 per cent CI [0.19, 1.01], and those of law students $t(285.70) = 3.14$, $p = 0.002$, $d_{\text{cohen}} = 0.32$, 95 per cent CI [-1.06, -0.24]. There was no difference between the control group and the law students.

In line with our expectations, post-hoc *t* tests showed that there were no significant differences between groups for LLE of very close persons.

The ANOVA for the life experiences of close persons showed a significant interaction of experiences and major, $F(2,612) = 5.34$, $p = 0.005$, $\eta_p^2 = 0.02$, and a main effect for experiences, $F(1,612) = 6.49$, $p = 0.011$, $\eta_p^2 = 0.01$. No main effect for major was found, $F(2,612) = 2.89$, $p = 0.056$.

Post-hoc *t* tests showed that 'close' persons of psychology students did have more PLE

Table 2: T-tests for all groups.

Measures comparisons	Self				Very close				Close				Not close			
	t (df)	p	d _{ebhen}	95% CI	t (df)	p	d _{ebhen}	95% CI	t (df)	p	d _{ebhen}	95% CI	t (df)	p	d _{ebhen}	95% CI
PLE																
Psych vs. Law	1.41 (341.1)	0.159	0.15	[-0.07, 0.42]	3.14 (285.7)	0.002*	0.32	[0.24, 1.06]	3.46 (267.65)	<0.001*	0.36	[0.24, 0.87]	2.92 (262.16)	0.004*	0.30	[0.13, 0.69]
Psych vs. Others	0.87 (423)	0.387	0.08	[-0.14, 0.36]	2.86 (288.48)	0.004*	0.29	[0.19, 1.01]	1.52 (361.15)	0.130	0.16	[-0.08, 0.63]	1.34 (372.92)	0.181	0.13	[-0.10, 0.54]
Law vs. Others	-0.58 (428)	0.561	-0.06	[-0.29, 0.16]	-0.41 (428)	0.682	-0.04	[-0.34, 0.22]	-2.18 (395.19)	0.030	-0.20	[-0.53, -0.03]	-1.65 (379.02)	0.099	-0.15	[-0.42, 0.04]
LLE																
Psych vs. Law	-1.33 (373)	0.184	-0.14	[-0.37, 0.76]	-0.01 (373)	0.989	0.01	[-0.27, 0.27]	-0.49 (373)	0.627	-0.05	[-0.48, 0.29]	-1.43 (313.24)	0.153	-0.14	[-0.28, 0.44]
Psych vs. Others	1.40 (345.65)	0.162	0.14	[-0.05, 0.31]	1.17 (345.45)	0.244	0.12	[-0.09, 0.35]	1.23 (205.51)	0.220	0.14	[-0.13, 0.57]	0.58 (423)	0.560	0.05	[-0.75, 0.14]
Law vs. Others	2.81 (326.11)	0.005*	0.28	[0.09, 0.48]	1.05 (322.65)	0.295	0.10	[-0.11, 0.37]	2.93 (255.41)	0.004*	0.30	[0.10, 0.52]	1.92 (279.99)	0.057	0.19	[-0.004, 0.30]

Note: *p ≤ 0.006 (Bonferroni correction), PLE = psychopathological life experiences; LLE = legal life experiences.

than those of law students, $t(267.65) = 3.46$, $p < 0.001$, $d_{\text{cohen}} = 0.36$, 95 per cent CI $[-0.87, -0.24]$. There were no significant differences for the other comparisons.

Post-hoc t tests showed that close persons of law students did have more LLE than those of the control group, $t(255.41) = 2.93$, $p = 0.004$, $d_{\text{cohen}} = 0.30$, 95 per cent CI $[0.10, 0.52]$. There were no significant differences for the other comparisons.

The ANOVA for the life experiences of not close persons showed a significant interaction of experiences and major, $F(2,612) = 5.42$, $p = 0.005$, $\eta_p^2 = 0.02$, and a main effect for experiences, $F(1,612) = 12.49$, $p < 0.001$, $\eta_p^2 = 0.02$. No main effect for major was found, $F(2,612) = 1.83$, $p = 0.162$.

Post-hoc t tests showed that the affiliated persons rated as 'not close' of psychology students did have more PLE than those of law students, $t(262.16) = 2.92$, $p = 0.004$, $d_{\text{cohen}} = 0.30$, 95 per cent CI $[-0.69, -0.13]$. There were no significant differences for the other comparisons.

Post-hoc t tests showed that there were no significant differences between groups for the LLE of affiliated persons rated 'not close'.

Discussion

The present study examined whether psychology students and their close relationships experienced more PLE than students with other majors as well as their close relationships, and whether this pattern is only true for PLE but not for the MRLE of law students. To control for baseline levels of PLE and LLE, we did look into the differences the psychology and law group respectively showed to the control group.

In line with hypotheses, results show that all groups of affiliated persons of psychology students had more PLE than affiliated persons of law students and the control group. This indicates that indirect psychopathological experiences could play an important role for subsequent vocational choice to become a psychologist, which fits with the stereotype of the neurotic psychologist with a troubled social background.

To rule out that these results are not specifically a psychology students' phenomenon but occur in every major, we used law exemplarily as a comparison major. We hypothesised that affiliated persons of law students do not have more LLE than the ones of students with other majors. This was true for the very close persons of law students. Hence, it is not usual that each student's very close environment had many MRLEs, but it is a special feature of psychology students, consistent with the stereotype of the neurotic and wounded psychologist.

The main effect of major on MRLE of very close persons shows that very close persons of psychology students did have more PLE and not less LLE than both other groups. Additionally, the LLE of close and not close persons of psychology students did not differ from the control group. In contrast, all groups of affiliated persons of law students had the least PLE of the three major groups. This implies that the affiliated persons of psychology students have more difficult experiences overall, again supporting the theory of a troubled social background.

The results showed that psychology students did not have significantly more personal PLE than the law students or the control group. However, there was a significant interaction effect of experiences and major for personal MRLE. The means of personal PLE suggest a trend towards the hypothesised direction, with psychology students rating their PLE higher than both law students and the control group. The failing of this difference to gain significance could (partially) be explained by the fact that psychological disorders and traumatic events during childhood and adolescence have a negative impact on school achievement (Lipschitz et al., 2000; Mrdjénovich & Bischof, 2003). This might negatively influence the probability to meet the eligibility criteria for psychology studies which rely mostly on high-school diploma results.

In contrast, law students had significantly more LLE than the control group. This result could be biased though, as the exclusion of

the studies' influence was not established equally for the different MRLEs (see below).

Limitations and future research

The present study extends prior research by including the students' social environment rated for emotional closeness and the influence it can have on them. A further improvement was made by controlling for reciprocal linkages by asking the students only to consider experiences that happened prior to their studies. In addition, the questions measuring PLE referred to past professional assessments (e.g. diagnoses), reducing self-report biases. However, the studies' reciprocal influence was not controlled equally for the MRLE of law students. Minor offences, such as verbal insults or drug consumption, were probably more likely to be noticed as an offence and therefore mentioned for law students than for students with other majors, even though nearly every student knows at least someone who reviled somebody or illegally used drugs (for an epidemiological study, see Roth, 2002). In sum, psychology students might have more own MRLE than law students, but the present results could be biased by law students' attained knowledge about what an offence or crime actually is. Therefore, future research should establish a more objective assessment of MRLE, e.g. by using expert focus groups to operationalise the MRLE of different majors.

As students were asked for a retrospective self-report, a causal interpretation of the influence of MRLE cannot be made. The memory of these experiences could be influenced by MRLE being more salient in a student's mind. However, this effect should influence the law students as well as the psychology students, hence not confounding the results of this comparison in a certain way. Still, longitudinal studies would enable a causal interpretation and explore the development of students' MRLE and relevant moderating or mediating variables during their high school years and beyond

to examine their influence on vocational choice.

As the sample was obtained through social media platforms, the possibility of a selection bias could not be ruled out. A further limitation is that despite being a mixed sample of undergraduate and graduate students, participants were not asked about their area of specialisation. As the definition of PLE and the pathway from PLE to the becoming a psychologist described before refer to clinical experiences, they should apply particularly to students interested and specialising in clinical psychology.

Furthermore, these results implicate many future research questions, specifically about the impact of MRLE on the quality of psychotherapists work. The concept of post-traumatic growth can definitely be seen as closely related to the aforementioned archetype of the wounded healer, which would suggest a positive effect on the therapeutic work. Hence, future research could concentrate on differences in the characteristics of psychotherapists high and low in MRLE and their respective styles of psychotherapy, types of therapeutic relationships and outcomes of the treatment.

Implications

The present study shows that psychology students often get confronted with mental health issues in their personal environment. This is in line with Connor-Greene (2001) who emphasised that lecturers should teach clinical psychology topics with particular sensitivity and empathy. Furthermore, lecturers should bear in mind that especially indirectly affected students often build up their own, individual and unprofessional models of psychological disorders which can lead to misunderstandings regarding general categorisations. Therefore, it is important to focus on scientifically-based general models, while emphasizing the diversity of individual manifestations of disorders.

These results do not implicate a general fragility or emotional weakness of psychology

students – if teachers are aware of these results, they can use this in a positive way to point out the aforementioned individual differences in disorders. Another positive side-effect could be a deeper understanding of the practical ‘real-life’ implications of psychological disorders and less stereotypes about those affected by students with PLE (Corrigan et al., 2014; Kosyluk et al., 2016).

These implications also affect practical training in psychotherapy. Preconditions of students who experienced a trauma or have been in therapy differ from those of individuals who have never experienced mental health issues in terms of their previous knowledge, understanding and needs. Psychotherapists should apply special care in leading groups focusing on participants’ own experiences, which are mandatory in Germany during psychotherapy training and aim to increase the awareness of a trainee’s own pathological and non-pathological patterns.

We hope that these results contribute to a better understanding of psychology students and thus to a better quality of education as well as inspire further research.

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